

REMARKS

This is intended as a full and complete response to the Office Action dated March 6, 2006. In view of the following amendment and discussion, the Applicants believe all claims are in allowable form.

CLAIM REJECTIONS

35 U.S.C. §112 Claim 30

Claim 30 is rejected under 35 U.S.C. § 112, second paragraph. In response, the Applicants have amended claim 30 by deleting the term “(2.5°)”. Accordingly, the Applicants respectfully request the rejection be withdrawn and claim allowed.

35 U.S.C. §112 Claims 3-4 and 15-16

Claims 3-4 and 15-16 are rejected under 35 U.S.C. § 112, second paragraph. In response, the Applicants have amended claim 3 and 15, from which claim 4 and 16 depends, to more clearly recite the aspects of the invention. Additionally, the Applicants have amended claim 26 correspondingly to overcome the rejection. Accordingly, the Applicants believe all claims are now in allowable form.

35 U.S.C. §102 Claims 1, 5, 9 and 12

Claims 1, 5, 9 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Stevens et al* (U.S. Patent No. 5,632,873). In response, the Applicants have amended claim 1 to more clearly recite the aspects of the invention.

Independent claim 1 recites elements not taught or suggested by *Stevens*. *Stevens* teaches an annular outer ring 12 and an inner ring 11 disposed on a substrate support member 20. The annular outer ring 12 has horizontal roof 44 extending radial inward. The underside of the roof 44 includes a lip 36 containing six slots 46 housing an ejector tab 54 of the inner ring 11. The horizontal roof 44 which houses the inner ring 11 does not have an inner perimeter adapted to mate with one or more raised surfaces formed in the inner ring and form one contiguous raised surface with the annular outer ring 12.

Therefore, *Stevens* does not teach or suggest a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited in claim 1.

The Applicants submit that "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)(citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)). Here, as *Stevens* does not teach or suggest a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited in claim 1, *Stevens* fails to disclose each and every element of the claimed invention recited by independent claim 1, and thus, a *prima facie* case of anticipation is not established.

Thus, the Applicants submit that independent claim 1, and claims 5, 9, 12 depending therefrom, are patentable over *Stevens*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claim 2

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stevens* in view of United States Patent No. 6,676,759 issued January 13, 2004, to *Takagi, et al.* (hereinafter referred to as *Takagi*). In response, the Applicants have amended claim 1 to more clearly recite the aspects of the invention.

Independent claim 1, from which claim 2 depends, recites elements not taught or suggested by the combination of *Stevens* and *Takagi*. The teaching of the *Stevens* has been discussed above. *Takagi* teaches a recess 26 of a subseptor 22 having a slope surface 28 (Figure 4). *Takagi* fails to teach or suggest a modification to *Stevens* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited in claim 1, and one or more raised surface disposed adjacent a bore of the cover ring comprising a first and second

raised surfaces with the first raised surface comprising a linear raised surface extending a length of one side of the bore and the second raised surface comprising an arcuate outer diameter radial with the cover ring and an inner perimeter conforming to one or more sides of the bore, as recited by claim 2. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claim 2 is patentable over *Stevens* in view of *Takagi*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claim 3

Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stevens* in view of *Takagi* and further in view of United States Patent No. 5,911,133 issued July 13, 1999, to *Tepman, et al.* (hereinafter referred to as *Tepman*). In response, the Applicants have amended claim 1 to more clearly recite the aspects of the invention.

Independent claim 1 recites elements not taught or suggested by the combination of *Stevens*, *Takagi* and *Tepman*. The teachings of the *Stevens* and *Takagi* have been discussed above. *Tepman* teaches a rectangular bore configured in a ring covering an edge of a substrate during deposition. *Tepman* fails to teach or suggest a modification to *Stevens* and *Takagi* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited in claim 1. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claim 3 is patentable over *Stevens* in view of *Takagi* and further in view of *Tepman*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 4 and 6-8

Claims 4 and 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stevens* in view of *Takagi* and in view of *Tepman* and further in view of United States Patent No. 6,537,011 issued March 25, 2003, to *Wang, et al.* (hereinafter referred to as *Wang*). In response, the Applicants have amended claim 1 to more clearly recite aspects of the invention.

Independent claim 1 recites elements not taught or suggested by the combination of *Stevens*, *Takagi*, *Tepman* and *Wang*. The teachings of the *Stevens*, *Takagi*, and *Tepman* have been discussed above. *Wang* teaches a pedestal having one or more pedestal support members, and a single ring having a base plate defining an opening and one or more substrate support members mounted on the base plate. A portion of the pedestal and the support ring form a substrate supporting assembly. *Wang* fails to teach or suggest a modification to *Stevens*, *Takagi* and *Tepman* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited in claim 1. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claims 4 and 6-8 that depend from claim 1 are patentable over *Stevens* in view of *Takagi* and further in view of *Tepman* and further in view of *Wang*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 10 and 11

Claims 10 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stevens* in view of *Wang* and further in view of United States Patent No. 5,632,873 issued to *Roderick, et al.* (hereinafter referred to as *Roderick*). In response, the Applicants have amended claim 1 to more clearly recite the aspects of the invention.

Independent claim 1 recites elements not taught or suggested by the combination of *Stevens*, *Wang* and *Roderick*. The teachings of the *Stevens* and *Wang* have been discussed above. *Roderick* teaches a collar ring made of suitable dielectric

ceramic materials sufficiently thin to provide an RF electrical field absorption. The collar ring comprises an annular ring that covers the peripheral portion of a substrate support and supports the substrate during processing. *Roderick* fails to teach or suggest a modification to of *Stevens* and *Wang* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited in claim 1. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claims 10 and 11 that depend from claim 1 are patentable over *Stevens* in view of *Wang* and further in view of *Roderick*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 13, 17-21, 24 and 28-32

Claims 13, 17-21, 24 and 28-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wang* in view of *Stevens*. In response, the Applicants have amended claims 13 and 24 to more clearly recite the aspects of the invention.

Independent claims 13 and 24 recite elements not taught or suggested by the combination of *Wang* and *Stevens*. As discussed above, *Wang* teaches a pedestal having one ore more pedestal support members, and a single ring having a base plate defining an opening and one or more substrate support members mounted on the base plate. A portion of the pedestal and the support ring form a substrate supporting assembly. *Stevens* teaches an annular outer ring 12 and an inner ring 11 disposed on a substrate support member 20. The annular outer ring 12 has horizontal roof 44 extending radial inward. The underside of the roof 44 includes a lip 36 containing six slots 46 housing an ejector tab 54 of the inner ring 11. The horizontal roof 44 which houses the inner ring 11 does not have an inner perimeter adapted to mate with one or more raised surfaces formed in the inner ring and form one contiguous raised surface with the annular outer ring 12.

Neither *Wang* nor *Stevens*, alone or in combination, teaches or suggests a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring, as recited by claims 13 and 24. Furthermore, there is no suggestion discerned in *Wang* or *Stevens* of modifying the devices disclosed therein in the direction of claim 13 and 24, nor is there any suggestion of the desirability of such modification. The absence of such a suggestion to combine the references is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 100 F.3d 1573, 1579 (Fed. Cir. 1997). As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claims 13 and 24, and all claims depending therefrom, are patentable over *Wang* in view of *Stevens*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 14 and 25

Claims 14 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wang* in view of *Stevens* and further in view of *Takagi*. In response, the Applicants have amended claims 13 and 24 to more clearly recite the aspects of the invention.

Independent claims 13 and 24 recite elements not taught or suggested by the combination of *Wang*, *Stevens* and *Takagi*. The teachings of the *Wang* and *Stevens* have been discussed above. *Takagi* teaches a recess 26 of a subseptor 22 having a slope surface 28 (Figure 4). *Takagi* fails to teach or suggest a modification to *Wang* and *Stevens* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring,, as recited by claims 13 and 24. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claims 14 and 25 that depend from claims 13 and 24 respectively are patentable over *Wang, Stevens* in view of *Takagi*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claim 15-16 and 26-27

Claims 15-16 and 26-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wang, Stevens, Takagi* and further in view of *Tepman*. In response, the Applicants have amended claims 13 and 24 to more clearly recite the aspects of the invention.

Independent claims 13 and 24 recite elements not taught or suggested by the combination of *Wang, Stevens, Takagi* and *Tepman*. The teachings of the *Wang, Stevens* and *Takagi* have been discussed above. *Tepman* teaches a rectangular bore configured in a ring covering an edge of a substrate during deposition. *Tepman* fails to teach or suggest a modification to *Wang, Stevens* and *Takagi* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring,, as recited by claims 13 and 24. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claims 15-16 and 26-27 that depend from claims 13 and 24 respectively are patentable over *Wang, Stevens, Takagi* and *Tepman*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.

35 U.S.C. §103 Claims 22-23 and 33-34

Claims 22-23 and 33-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wang, Stevens* and *Roderick*. In response, the Applicants have amended claims 13 and 24 to more clearly recite the aspects of the invention.

Independent claims 13 and 24 recite elements not taught or suggested by the combination of *Wang*, *Stevens* and *Roderick*. The teachings of the *Wang* and *Stevens* have been discussed above. *Roderick* teaches a collar ring made of suitable dielectric ceramic materials sufficiently thin to provide an RF electrical field absorption. The collar ring comprises an annular ring that covers the peripheral portion of a substrate support and supports the substrate during processing. *Roderick* fails to teach or suggest a modification to of *Wang* and *Stevens* that would yield a capture ring comprising an arcuate base plate having an inner perimeter adapted to mate with one or more raised surfaces of a cover ring and form one contiguous raised surface with the cover ring,, as recited by claims 13 and 24.. As such, a *prima facie* case of obviousness has not been established as the references fail to teach or suggest all the elements as claimed by the Applicants.

Thus, the Applicants submit that claims 22-23 and 33-34 that depend from claims 13 and 24 respectively are patentable over *Wang* in view of *Stevens* and further in view of *Roderick*. Accordingly, the Applicants respectfully request that the rejection be withdrawn and the claims allowed.


CONCLUSION

Thus, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and swift passage to issue are earnestly solicited.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

June 6, 2006
Date


Keith P. TABOADA
Attorney Reg. No. 45,150
(732) 530-9404

Patterson & Sheridan, LLP
595 Shrewsbury Avenue
Suite 100
Shrewsbury, NJ 07702